

Of Henry Derry & L. Pal.
To. W. Hen. Locock
HUMAN ORDURE, K

Botanically Considered.

The First ESSAY, of the kind, Ever
Published in the WORLD.

*What infinite Varieties have sprung,
From a well cultivated Mass of Dung?*
Cornel. Agricol. Translat.

*Let not the Humility of the Subject lessen At-
tention.* Lord Bacon.

*The Way to Elegance of Stile, is to employ the
Pen upon every Errand; and the more trivial
and dry it is, the more Brains must be allowed
for Sauce.* Osburn.



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HUMAN ORDURE,

Botanically Considered:



HERE is certainly no Happiness in this Life, that can possibly equal Leisure and Retirement ; for a Man in this State has it in his Power to exercise all his Intellectual Faculties with the utmost Freedom and Satisfaction, as well upon the meanest and humblest Subjects, as upon the most sublime and exalted Ideas ; I shou'd compare him to the Poet who writes in Blank, whose noble unconfin'd Thoughts are not limited by that childish harmonious Prison called Rhyme, by which I wou'd be understood to mean those People who chime sympathetically, as it were with the Absurdities, and Narrownesses, of the rest of
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their ill-judging Fellow-Creatures. But the generous Retired blank Philosopher exercises the Talents of a Free-will, unenvy'd and unadmir'd. Surely Seneca's * Observation is both wise and just :

*Qui notus nimis omnibus
Ignotus moritur sibi.*

And the only sure Way for a Man of Sense to avoid the *nimis notis*, and to enjoy and know himself thoroughly, is in an agreeable Retirement, free from the officious Impertinences of a promiscuous Society ; this wise Apophthegm has made me an entire Votary to Solitude, where I have enjoyed for some Time past an uninterrupted Variety of Speculations.

But there has none employed my Thoughts of late so much, as a very nice Inquisition, or Inspection, into the frequent Differences we meet with in Human Ordure. The World may say, perhaps I had very little to do, and that so solemn and serious a Preface ill became so foul a Subject ; but, let what will be said, I can't help communicating my Sentiments, but will endeavour to wrap 'em up in as cleanly a Manner, as the Dirtiness of the Theme will admit.

'Tis an Aphorism in Physick †, *Sedes Sanorum oportet esse figuratas*, that is, That the Excrements

* Trag. Thyest. Act. II.

† D. Sennert. Cap. de Excretis & Retent.

of People in full Health ought to be figured. For my Part, I shan't confine myself to any physical Meanings or Explanations of this Maxim, but shall candidly give my own Observations on the Subject.

There is no Man that ever was so humble as to observe Human Ordure, but must confess there is a wonderful Variety in all Productions of this Nature. I entirely exclude the *Fæces Colliquativæ* (called in *English* by the Figure Onomatopœia, *Squitter*) being seldom the *Sedes Sanorum*, and therefore foreign to the Subject. For my Part, I have found such a Variety, that I have trib'd and class'd them, with as much Pleasure and Care as Botanists do Plants.

And the first of the Tribe that claims Precedence, is the *Merda* * *Campanulata* five *Turbinata*, the Bell-form'd Excrements, or resembling a Boy's Top revers'd; the distinguishing Characteristick of this kind of Evacuation, is, that it rises with a broad Basis, and terminates with a narrow Apex; under this Denomination are comprehended, those form'd like an Obelisk, *Cheshire Hat*, *Sugar-Loaf*, *inverted Pyramid*, *Portugal Pear*, &c. These are always of a firm Consistency, the Product of a well concocted Aliment, and are always generated in a robust strong

* Vid. Dr. Stephens's *Botanical Elements*, pag. 13.

Body, and give us sure Indications of a firm well-ton'd set of Intestines, with a salubrious Attraction of the Lacteal Vessels ; to be met with mostly in Plow'd Fields, High Roads, and sometimes in Meadows. I have seen some faint Icons of this Species about the Suburbs of Cities ; these generally belong to Farmers, Plowmen, Threshers, &c. I have not had Time to enquire into the Virtues or Vices of these, or any of the Kinds I have met with ; but that must be my next Work, according as this meets with Encouragement.

The next Tribe are, the *Merdæ* * *Dolioloides*, or Tun-form'd Excrements ; these are generally thick in the Middle, and small at both Extremities, like a Rowling-pin or Wooden Cat ; these, being exactly divided in the Middle, are converted into a Species of the former Tribe.

These are of as firm a Consistency as the *Campanulatae*, but don't seem to be so naturally colour'd ; but whether this be a Fault in the first, second, or third Concoction, I leave to the Decision of the Curious ; these Kinds are usually to be met with about Cities, and sometimes in the Country ; they are much larger in *England* than here, and larger again in *Holland* : I remember, about four Years ago, I was walking with an *English* Merchant, in a Field near the Town of

* See farther into the *Botanical Elements*, p. 14.

Antwerp, where I spied one of these *Tun-form'd Affairs* lying by a Ditch-side, and, I being a Stranger in the Country, took it for a small *Rundlet of Brandy*, and wou'd certainly have b——t myself with Eagerness to seize it before my Friend, had he not undeceiv'd me, by laughing heartily, and asking, what the D——l I was going to do with the *Ufgang* or *Stront* of a *Dutchman*? I must own I never was more deceiv'd nor asham'd in my Life, but nothing certainly ever more resembled the thing I took it for than it did; its Shape and Colour so regular, and its Bulk equivalent to a Keg of about three Quarts Measure, and the * *Valvulae Conniventes* of the *Intestinum Colon* had made circular Impressions on both Extremities, that exactly resembled *Hoops*; and what was more particular, there was the Stone of some Fruit voided with the Excrement, which lay *à propos* in the Center of the thicker Part, and exactly resembled a *Bung*, so that really after all 'twas a very natural Mistake; but what surpriz'd me more, was, considering the Diameter of this monstrous Evacuation, how 'twas possible an human † *Rectum* cou'd contain it; but afterwards I saw larger, and the Frequency in a great measure abated my Surprise; and considering the Frame of the *Dutch* in general about

* Vid. Dr. Willis, Bartholin. Verhyen, &c. de Intestinis.

† The Arse-Gut or Intestinum Rectum.

the Hips, or *Ossa inominata*, *Os Sacrum*, *Coxigis*, &c. where the streight Gut terminates, 'tis no great Wonder they shou'd have such gigantic Stools: I have often in dark Nights stumbled over some of them.

N. B. 'Twas upon this comely Species of Evacuation, that the munificent *King James the First* confirmed the Honour of *Knighthood* *.

The Third Class or Tribe are the *Merdae Variegatæ*, *five Marmoratæ*, the Marbl'd or Strip'd Excrement; 'tis really diverting to see how Nature sports in the Production of this kind of Fæces; as to the Shape, they may participate of the two former, but have not half the Solidity or Consistency; I have seen some white, bluish, and brown, others yellow, orange, and grey, and all in the same Excretion; these are properly the *Variegatæ*, but the *Marmoratæ*, tho' of the same Tribe, yet their distinguishing Characteristicks are different, for their Variations chiefly depend on sanguiferous Streaks, and Specks, and Lines of a different colour'd Choler or Bile, marbling as it were the Fæces: The former Species of this Tribe proceed either from Meats of different Kinds or Consistency eaten the same Day, or from Drinks of different Colours, taken after, which generally tinge some Parts of the Excrement with

* Vide Gabriel Benzoar's *Remarkable Transactions of the Kings of England since W. the Conqueror*, page 102.

a Colour some Way or other analogous to what was originally taken in. (Claret-Drinkers always have costive dark reddish Stools, and, as Costiveness was looked upon to be beneficial to Men in Years, upon this Account 'twas order'd to old Men by * two of the greatest Philosophers of the Faculty in their Days. But this by the bye.)

The latter Species of this Tribe proceeds either from Over-straining, which occasions perhaps a Rupture of some minute intestinal Vessel which spills its Contents upon this kind of Fæces in Streaks, or perhaps from a Tincture of the Gall in the *Intestinum Duodenum*, or it may be from an accidental Mixture of an *Atrabilis* with the Fæces in the Circuit of the Guts; but, happen as it will, I have been strangely diverted with the Variety of Figures that those Mæandrous variegated Streaks have produc'd; I have often fancy'd I have seen as whimsical Landskips as the Hand of Art could possibly depict; at other Times I have actually and distinctly read unintelligible Words formed by those irregular party-coloured Streaks, which makes me believe, 'twas by the Assistance of those Species of Fæces that † *Zid Benzool*, the famous *Persian* Soothsayer, used to prophesy, and not only foretel the Death of particular Personages, but

* Hippocrates and Galen.

† *Zid Benzool*, or *Ziddy*, died at *Ispahan* Anno 1694. Some say he was burned at *Amanzarifdin* for Sorcery.

also the Fate of Cities, Provinces, Kingdoms, &c. There is a very authentick Tradition that says, this *Zid Benzool* foretold the Death of the Governor of *Susa* (*Anno* 1662) by some extraordinary Hieroglyphick he saw in his Excrement, three Days before he was killed by the random Shot of an Arrow: This Way of Divination, I think, bears some Analogy to that of the Ancients, who used to prophesy by the *Viscera* or Intrails of Beasts, Birds, and Men after Death; and indeed the Divination by * *Ob* or *Pythoniſſa* was only by Answers given from the *Viscera*, when in their proper Situation, and the Subject alive.

But why this Way of Fortune-telling by *Faces* has not been handed down to Posterity, and been better known amongst us, certainly must proceed from the Uncleanneſs and Filthineſs of the Subject by which we are to form our Predictions, tho' there is a Method of Fortune-telling even amongst us now, that bears some Reſemblance to that of the *Persians*, practiſed moſtly by a Sect of People calling themſelves *Ægyptians*, or *Gypſies*; and that is, by the *Faces* of Coffee, from thence calling themſelves alſo *Coffee-Toffers*; but, as 'tis now practiſed, 'tis a meer Cheat.

* Vide Selden de *Diis Syris Syntagmat.* 2. Plutarch in *Patin*, &c.

I remember to have been told an odd Story of one * T——S—— Esq; a Justice of the Peace in *Devonshire*, a Man of great Wealth and Immorality, who was remarkable for avoiding always those *Fæces Striatæ*, one Morning having Occasion to ease Nature in a Field, and, having done, died of an Apoplectick Fit before he had Time to pull up his Breeches; his Friends, missing him, after some Search found him lying by his *Fæces*, and the Word *CaVe*, writ, in the Manner express'd, upon his Excrement insanguineous Characters; and they that were Scholars in Company said, * 'twas an Admonition from *Ob* or the *Lares* of his Excrement, to take Care he should be decently buried, seeing he was a remarkable Man in his Country: But my Author fancies this was a Misinterpretation of the Meaning of the Word, for 'twas design'd no doubt (said he) for a Warning to the Gentleman himself; and he believed, had his Excrements been inspected into before, the same Phænomenon might have happened, and the Man might have either escaped or have been better prepared had he fortunately looked about him; but this is but a Conjecture. And indeed that very Action of *turning about* to see what's voided, which most People do (that have not the Opportunity of modest necessary Conveniencies) which I used to take to be nothing more than a

* Vid. *Verstegan de Terriculamentis, &c. pag. 102.*

natural Mechanical Motion, I believe entirely proceeds from some confus'd Ideas or Hints of this Nature, scattered amongst Mankind :

The Fourth Tribe of Excrements are the *Merda umbellifera*, take the Description.

This kind are a broad round *Fæces*, lying spread upon the Ground, like an Umbrella or full blown Rose, the Colour uncertain ; they are of a tolerable Consistency, but don't come nigh the Solidity of any of the former, but yet are firm and uniform : It was this kind of Excrement that both *Hippocrates* and after him *Celsus* said indicated the best State of Health, and were always the most beneficial to young People, and always the Consequence of a regular temperate Method of Living ; † *Helmont* says, They who have those kind of Evacuations, have always a free Use of their perspiratory Pores, and a fine thin Skin, but a constipated Belly makes a thick Skin.

'Tis upon this Species of Excrement that the innumerable minute greyish *Fungi*, like Down, always grow, vulgarly called *Mould*. I have for some Hours wonderfully amus'd myself by looking at those tender *Vibriffæ*, and have discovered by the Help of Microscopes, the most regular Vegetation, that cou'd possibly be perform'd by a Chymist after the nicest Process for the Transmu-

† Cap. de Diæta, page 56.

tation of Metals ; nay, I have perceived the very Motion of their rising, tho' by many Degrees slower than the Minute Hand of a Watch ; for, if we consider the Quickness of their Growth, and the Shortness of their Duration, when grown (for 'tis remarkable all *Fungi* grow and decay speedily) a Minute to them, in Proportion to their Size and Duration, is equivalent to a Year's Growth with other larger Vegetables ; and, considering they are produced from their native hot Bed, and spring so suddenly, it ought not to seem improbable, that one may perceive, by the Help of Glasses, their Vegetative Motion.

The ingenious Mr. † *Laurence*, in his Treatise of Horticulture, tells us of a Method of raising Purslain from an hot Bed, that in an Hour's Time should be fit to eat ; and certainly the Motion here must be perceivable to the naked Eye.

I have often with Pleasure fancied I cou'd discern, upon one of those *Fæces* overgrown with *Fungi*, the rude Lineaments of Gardens, Wildernesses, Espaliers, Groves, Orchards, Flower-knots, Edgings, &c. and have frequently lent my Glasses to those of my Friends who would venture their Noses so nigh, who have viewed those *Lusus Naturæ*, with as much Pleasure and Surprize as myself ; I have frequently, with a very nice *Forceps*, pluck'd up one of those funguous

† Page 84.

Fibres, and cou'd plainly perceive always a small Atom annex'd to the lower Extremity, which I take to be the Root of the *Fungus*; and I have frequently gathered Numbers of them, and endeavoured to analyze them for my own Satisfaction, to know what they really were, but I never prospered in the Event; however, the most rational Conjecture that can be made, is, That they certainly are the minute Seeds of some Fruit or Vegetable, that have been swallowed and pass off with the Excrement, and so have a momentary Vegetation afterwards. And here I can't but observe how often we are indebted to Accidents of this Nature, for several Sorts of Fruit-Trees, that are found wild, and supposed, either by Chance or Design, to have been tossed out of Gardens, or Seeds scattered Abroad by the Wind, or else to have had their first Rudiments laid there since the Creation or the Flood, such Fruits as Cherries, Apples, Raspberries, Plums, &c. when perhaps they owe their Birth to a T—d: 'Tis certainly a common Custom in *England* of eminent Gardeners who propose to propagate choice Stone Fruit, to give a Quantity of them to Children to eat, provided they promise to swallow the Stones, and they constantly watch them till they go to Stool, to pick them out; and this they aver to be the most natural and nicest Preparation, before they inter them, for they
never

never fail, being treated in this Manner, to come to the greatest Perfection.

M. * *Scharzini*, an *Italian*, in his Account of the Isle of *Cyprus*, tells us there is a particular Part in the West of the Island so overgrown with Cherry-Trees, that they take up nigh three hundred Acres of Land, and nothing can look more beautiful in the Season, than the innumerable Variety or chequer Work Nature produces by the Multiplicity of black and red Cherries ; but the latter Colour so predominates over the former, that Strangers, when at a Distance, fancy they see the *Mare Erythræum*, where *Pharaoh* and his Army perished : He further says, this immense Wilderness of Cherry-Trees is entirely owing to a kind of Bird called a † *Matzer*, of which there is a prodigious Number in this Part of the Island, exactly resembling our *Black-Bird*, only they have but one Foot, consisting of ten Claws, who live wholly upon Cherries, and always swallow the Stones, and when they void them, it being a moist Soil, they easily by their Vegetative Gravity sink and take Root, and are always vastly prolific. I doubt not but the small black Cherry cultivated in Gardens, and called a *Mazer*, takes its Etymology from hence.

* Page 96 of that Edition Printed at Rome, Anno 1702.

† Vid. Gesner Hist. Animal.

I am told there is a Plum-Tree called a *Green Gage*, at *Stow* in *England*, the Seat of the Lord *Cobham*, that constantly bears twelve or fourteen Dozen of large, luscious, green Plums, every Season, that was raised from a Stone taken out of a *French Marquis's* Excrement, who was a remarkable Epicure : Any Man that would eat three or four of these Plums, in about an Hour after, would be so prone to Leaping, Skipping, Cutting Capers, and Coopees, and so apt to make Love to every Female that came in the Way, that People would think he was mad, and that the Plums had a particular intoxicating Quality in their Juice like the * *Mala insana*, so that People only taste but never swallow them. Indeed I am apt to believe, that the Stone, in passing thro' the *Ragoo's* Guts, must have been impregnated with some of his alert Animal Juices. But this Account savours much of a Romance ; if otherwise, how great a Loss and Misfortune was it to the Learned World in general, that † *Anacreon* had such a treacherous and ill-contrived *Epiglottis* ? What a glorious poetick inspiring Grape have we lost ? And, to come nigher home, what a Law-inspiring Cherry-Tree have we lost, by the fatal Mæan-

* Vid. Ray *Hist. Plantar.*

† He was an old Amorous Lyrick Poet, very fond of a young Man called Bathyllus. He was choaked with a Grape-Stone. Vid. *Plin.*

drings of *J——N——*'s Intestines? These Hints I think ought to encourage our Botanists, and curious Gardeners, to search closely into this ingeniously odd Way of propagating.

The Fifth Tribe, are the *Merdae Sphærolatæ*, five *Balanoides*, the Button-formed Excrement; there are two Species of this Tribe, the first are those voided in small, firm, round, distinct Balls, Buttons, or Bullets; the second are those kind of Buttons conglomerate, or joined so close and compact together, as to form, at first Sight, one large solid Excrement, but upon a closer Scrutiny they lie *racematim* or *spicatum*, like an Ear of Indian Wheat, and may as easily be separated, if any one wou'd undertake the Work.

I have observ'd these Species to flourish mostly among Colleges, Schools, and most Places of publick Education, as well as in and about Prisons, Jails, and all Places of Confinement and Chastisement; and here I can't but observe how just that common *English* Phrase is, when a Man is under any Terrors or Apprehensions, of saying such a Man is *making Buttons*.

* I must beg Leave here to make a short Digression, and enquire into the Meaning of this Aphoristical Way of Speaking; and first, as I have already hinted, Fear is the supposed Au-

* *An Episode upon the Word making Buttons.*

thor, and therefore we must know in what Manner Fear acts upon an human Body.

Anatomists say, That Fear and Joy have the *same* Effect upon the Muscular Fibres, and actuate in the *same* Manner, that is, by relaxing the Fibres, particularly those circular ones of the *Sphincters*, and of Consequence there must be an involuntary Effusion of whatsoever those *Sphincters* are appropriated to contain, whether of Sweat (for we'll suppose something equivalent to a *Sphincter* even to every Pore) Urine, Stool, &c. but particularly of this last. Now a Man under the Fear of some imminent Danger (according to our Hypothesis) every Time he thinks of it, must have one of these involuntary Relaxations, perhaps twenty Times in a Day, or oftener, and of Consequence this must produce a *Bit* or *Button* of Excrement; and thus the otherwise, large, regular, and natural Stool, is subdivided into twenty in Miniature, in one Day. And this I take to be the true Meaning of the Word *making Buttons*.

* I remember to have read, in an History of the Revolutions of *Europe*, of a Battle fought at the Foot of Mount *Heckla* in *Iceland*, and one of the Antagonist Armies wanting, Ball, made Use of these *Fæces Balanoides*, to load their Musquets

* Vid. Vertot, page 1065.

withal, their Fears still supplying them with such kind of Ammunition; and, tho' the World may think that they made but a S—t—n Sort of Fight, yet they entirely discomfited their Enemies, partly by the unfavoury Smell, and partly by the Scattering and Commintion of the Excrementitious Bullets, which almost blinded them; and this I believe was the first Time Fear was ever known to gain a Victory.

I have been told by experienced Engineers, that the Inventers of Stink-Pots took their first Hint from this remarkable Battle, only with the Addition of some few more slaughtering Materials.

This kind of Excrement, in Dogs, is called *Album Græcum*, so remarkably good for sore Throats, and for cleansing Linnen.

Horses mostly void this Species of Excrement, and some say 'tis of this kind in Cats, whereof the Musk and Civet proceed.

Here I beg Leave to give the World not only a very useful but a very wholesome Hint, because 'tis best known, by the Assistance of this Species of Excrement.

'Tis no easy Matter for one to say, justly, when he has done Stool; for, tho' a Person in full Health may have made a very plentiful Dejection, yet it often happens that he may not be so perfectly

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satisfied.

satisfied or easy as might be expected from such a kind of Evacuation ; and this I take to be the Diagnostick Symptom, by which we may judge there still remains some Fragment in the Gut to be avoided, which, by its Weight upon the Sphincter of the Gut, may occasion what Physicians call a *Tenesmus* or *Needing*. But the sure Prognostick by which we may be certain that the Business is done compleatly, is, by a certain *Sphænoid* or *Wedgelike Bit* of Excrement, that generally slips out after all ; the Shape of it shews (being very thin towards the Gut) that there is an exact and regular Closure or Coincidence of the Gut and its *Sphincter* ; you may very often observe this shapeful Morfel of *Fæces*, mounted at the Top of a plentiful solid Stool, like a *Lilliputian Grenadier's Cap* ; and this you may assure yourself of, that whoever evacuates in this Manner has finished his Stool compleatly. I have often heard Physicians say, that, if a Man urined, after his *Fæces* were voided, 'twas a sure Sign there was none left behind, there being an exact and nice Consent or Harmony between the two *Sphincters*, viz. of the *Vesica Urinaria* and of the *Rectum* ; but this Opinion I am told is quite exploded, as not at all to be depended upon. But to hasten to our sixth and last Tribe of *Fæces*, which are the

Merda

Merda Anomalæ or irregular Excrements, which are not reducible to any one certain Shape, but resemble sundry and various Figures; what I have observed them mostly to resemble I have summed up under the following Heads, *viz.* *Top-knots, Peepers, Carwls, Lappets, Pinners, Breast-knots, Shoe-strings, Robings, Beau-dashes, To my Love, and from my Love, &c.* And these I have remarked are, for the most Part, voided by Milleners, Quilters, Seamstresses, Mantua-makers, and Servant Maids. Another Species of this Tribe, are in the Form of *Letters* in all Languages, such as *Greek, Latin, Hebrew, Arabic, Persian, Syriac, Chaldean, &c.* These are mostly voided by School-Masters, Writing-Masters, Lawyers, Language-Masters, Physicians, and Learned Divines.

The Third Species of this Tribe are those resembling *Lines, Curves, Rectangles, Triangles, Quadrangles, Isosceles - Triangles, Perpendiculars, Squares, Cubes, &c.* with Variety of other Figures in the Mathematicks: These I have observed are generally voided by Astronomers, Geographers, Mathematicians, Almanack-makers, Fencing-masters, Dancing-masters, Riding-masters, and W——masters.

I was acquainted with a very worthy Gentleman, a Mathematician in *Edinburgh*, who in the

whole Course of his Life never S—t out of the Form of an Iſosceles-Triangle, excepting when he had a Looseness; and even then, he told me, it generally run into the Form of a Pentagon.

Daniel Bournbeck, the famous *Dutch* Fencing-master, told all his Scholars (from one of whom I had the Story) that his *Fæces* always came from him in one solid streight Line, but, when it touched the Ground it broke exactly in the Middle, and divided into two; and the Extremities of each, falling across one another slanting, represented the most regular Posture of the Crossing of two Foils or Rapiers, at the first On-set or Meeting.

Mynbeer Van Hutten, Professor of the Mathematicks at *Middleburgh* in *Zealand*, tells us himself, in * his Life, that, ever since he began to study that elaborate Science intensely, he was always Costive in his Body; and, whenever he went to Stool, he voided three Pieces of Excrement, that fell into the Form of a Gnomon, and, whenever he was the least indisposed, there fell a fourth that made a regular Diagonal.

* See his *Prefatory Discourse* Page 19. to his *Collect. Geomet.*

I have several curious Instances of this Nature by me, that I have collected from Time to Time, besides some diverting and useful Remarks upon the *Fæces Colliquativæ*, which I shall publish very speedily, if this has any tolerable Success in the World.

F I N I S

(12)

STUDY IN THE HISTORY OF THE
ARTS AND SCIENCES
OF THE
HUMAN MIND
AND
NATURE



BRITISH MUSEUM

